# EAB FREQUENTLY ASKED QUESTIONS

### What is Emerald Ash Borer?

Emerald ash borer (EAB) is an invasive, non-native insect that attacks and kills all species of North American ash trees, including white, green and black ash. EAB is native to Asia and was first detected in the U.S. in the summer 2002 feeding on ash trees in the Detroit area. As of May 1, 2009 EAB has not been confirmed in the northern Plains states - (Kansas, Nebraska, North Dakota or South Dakota).

### What do I recognize Emerald Ash Borer?



Adult have 1/2 –inch long, slender, emerald green bodies.

Emerald Ash Borer larvae can grow up to 1 ¼ inch long. They are white or cream colored. They have brown heads and a 10-segmented body with a pair of brown, pincer-

like appendages on the last segment.

### Why should I be concerned about Emerald Ash Borer?

Emerald Ash Borer larvae feed on the tissues just below the bark. As they feed, larvae create serpentine tunnels, also called galleries, that disrupt the tree's ability to transport water and nutrients and eventually kills the tree.

Emerald Ash Borer adults typically emerge during June and July, leaving D-shaped exit holes in the bark. After emerging, the adults feed on ash foliage and can live for approximately three weeks.

#### What are symptoms of Emerald Ash Borer?









Symptoms of Emerald Ash Borer include canopy dieback, beginning in the top one-third of the canopy, sprouting from the base of the tree and trunk, bark splitting, serpentine galleries below the bark, D-shaped exit holes and increased woodpecker activity.

#### What species of trees does Emerald Ash Borer attack?

EAB attacks and kills all species of North American ash, including white, green and black ash. Mountainash is not a true ash, so it is not threatened by Emerald Ash Borer.

#### How do I identify an ash tree?







Ash trees exhibit an opposite leaf pattern, meaning that leaves and buds are located directly across from each other. Ash leaves are compound and typically consist of 5 to 11 leaflets. The edges of the leaflets may be smooth or toothed. On mature ash trees, the bark has a distinct pattern of diamond-shaped ridges. Younger trees have smoother bark. When seeds are present, they appear in paddle-shaped clusters that stay on the tree until late fall or early winter.

# Where is Emerald Ash Borer from originally?

Emerald Ash Borer is native to Asia.

### When did Emerald Ash Borer get to the United States?

Emerald Ash Borer was first detected in the U.S. in the summer 2002, feeding on ash trees in the Detroit area.

# **How does Emerald Ash Borer spread?**

Emerald Ash Borer is spread primarily by moving infested firewood, ash wood products and nursery stock. Moving firewood and other ash wood products within areas infested by Emerald Ash Borer and out of infested areas is regulated by state and federal agencies. You can help prevent the spread of Emerald Ash Borer, and other wood-dwelling invasive pests, by collecting or purchasing local firewood at your destination. For more information, visit <a href="https://www.dontmovefirewood.org">www.dontmovefirewood.org</a> and <a href="https://www.stopthebeetle.info">www.stopthebeetle.info</a>.

### Where has Emerald Ash Borer?

As of May 1, 2009, Emerald Ash Borer has been detected in Michigan (both the upper and lower peninsulas), Illinois, Indiana, Maryland, Missouri, Ohio, Pennsylvania, Virginia, West Virginia and Wisconsin. In Canada, Emerald Ash Borer has been detected in Ontario and Quebec.

### Can anything be done to prevent Emerald Ash Borer from killing ash trees?

Unfortunately, nothing can be done to stop Emerald Ash Borer from spreading into new areas and killing ash trees. In the next several years we may have new methods for slowing the Emerald Ash Borer's spread, but they will only *slow* its spread, not *stop* it. In areas where Emerald Ash Borer is present, insecticide treatments can be used to protect high-value trees, such as large shade trees, historic trees and trees highly valued by homeowners. Researchers are currently working to develop new treatments for Emerald Ash Borer.

# Is there a treatment for Emerald Ash Borer?<sup>1</sup>

Insecticide treatments can be effective in protecting trees from Emerald Ash Borer. The treatment available for homeowner use is a soil application of imidacloprid (such as Bayer Advanced Garden<sup>TM</sup> Tree and Shrub Insect Control). The application should be made in May and is most effective on small trees. Tree care professionals are able to use additional products such as trunk injections and trunk and foliage sprays. More information about available treatment methods can be found online at: <a href="https://www.emeraldashborer.info/files/E2955.pdf">www.emeraldashborer.info/files/E2955.pdf</a> and <a href="https://www.emeraldashborer.info/files/eabcontrol.pdf">www.emeraldashborer.info/files/E2955.pdf</a> and <a href="https://www.emeraldashborer.info/files/eabcontrol.pdf">www.emeraldashborer.info/files/eabcontrol.pdf</a>.

# Should I treat my ash tree before it gets Emerald Ash Borer?

No treatment is needed until Emerald Ash Borer has been found within 30 miles of your tree. If your tree has symptoms like those of an Emerald Ash Borer infestation, such as canopy dieback or borer exit holes, you may want to have a tree care professional examine the tree. To locate a certified arborist in your area visit: www.kansasarborist.com.

### Should I remove my ash tree before it gets Emerald Ash Borer?

If your tree is healthy, there is no reason to cut it down. If it is dying or diseased, it may be best to hire a certified arborist to look at your tree and determine whether it has Emerald Ash Borer or another insect or disease problem. There are a number of native insects that attack ash trees, so if your tree is displaying symptoms, it may be that you have one of these other pests. With highly destructive invasive insects like the Emerald Ash Borer, it is best to err on the side of caution by seeking professional guidance if you suspect your tree is infested.

### **Should I continue planting ash trees?**

Given the threat of Emerald Ash Borer and the abundance of ash, we do not recommend planting more ash. Ash has been popular in landscape, agro forestry and conservation plantings for decades. This popularity has led to many ash trees being planted in communities throughout Kansas and the northern Plains. Because diversity is an important measure of a community forest's overall health, it is important to plant a variety of trees. There are a number of trees that grow well in Kansas that are under planted. To learn which trees are best for your landscape, we recommend you contact:

Kansas Forest Service 2610 Claflin Road Manhattan, KS 66502 785-532-3300

Or visit: www.kansasforests.org/pubs/community/index.shtml

#### Are there any ash varieties that are resistant to EAB?

Early research has not revealed a variety native to the U.S. that is not susceptible to the Emerald Ash Borer but research is continuing.

### What are alternatives to ash?

Maple, Box Elder, Birch, Hornbeam, Catalpa, Locust, Kentucky Coffeetree, Oak, Sweet Gum, Buckeye, Hickory, and Hackberry are all good alternatives.

<sup>&</sup>lt;sup>1</sup> Specific product information does not constitute an endorsement for that product.

#### What other insects attack ash trees?





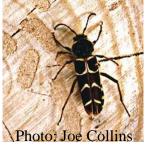


Banded Ash Borer

Eastern Ash Bark Beetle

Red Headed Ash Borer







Ash/Lilac Borer

**Banded Ash Clearwing** 

Carpenterworm Moth

There are several species of native ash borers that attack ash trees. The banded ash clearwing, carpenterworm and ash/lilac borer attack healthy ash trees. The redheaded ash borer, banded ash borer and eastern ash bark beetle all attack stressed or dying ash trees. For more information about these insects, see Michigan State University Extension Bulletin E-2939, *Native Borers and Emerald Ash Borer Lookalikes*.

### What other insects look like Emerald Ash Borer?







Bronze Birch Borer

Six-spotted Tiger Beetle

Caterpillar Hunter

There are many species of insects that are frequently mistaken for Emerald Ash Borer. The bronze birch borer looks very similar to Emerald Ash Borer and even presents similar symptoms. However, this borer attacks stressed birch trees. The six-spotted tiger beetle, two-lined chestnut borer, and caterpillar hunter are all similar in color to Emerald Ash Borer. The Japanese beetle is also frequently mistaken for Emerald Ash Borer. For more information about these insects, see Michigan State University Extension Bulletin E-2944, *Don't be Fooled By Look-Alikes*.

### Who should I call if I think I have EAB on my tree?

Kansas Department of Agriculture Plant Protection and Weed Control Program (785) 862-2180

Kansas Forest Service (785) 532-3300

# What can be done with wood from trees killed by the Emerald Ash Borer?

If Emerald Ash Borer is discovered in Kansas, it will trigger specific regulatory instructions. At that point we will provide instructions on how to dispose of infested wood. Research has shown that infested wood chipped to a size of 1" or less in two dimensions contained no pupal larvae. Emerald Ash Borer larvae are successfully killed when heated to 140 °F for two hours. Infested firewood can also be double-bagged to prevent escape of emerging Emerald Ash Borer.

### What is Kansas doing to prepare for Emerald Ash Borer?

Kansas is involved with the Great Plains Tree and Forest Invasives Initiative (GPI), a collaborative initiative of state forestry agencies in Kansas, Nebraska, North Dakota and South Dakota and the U.S. Forest Service. The goal is to prepare for the arrival of invasive insects, such as Emerald Ash Borer, in the northern Great Plains. The initial focus is on Emerald Ash Borer and states are inventorying regional tree and forest resources to determine which areas may be most impacted by Emerald Ash Borer and other invasive species. The groups are also developing public education programs, establishing citizen-based monitoring and detecting networks, and exploring opportunities for using wood generated by Emerald Ash Borer.

Kansas has an Emerald Ash Borer Readiness and Response Plan that involves many agencies and organizations. The most current Response Plan will always be posted at: <a href="https://www.ksda.gov/includes/document\_center/plant\_protection/Miscellaneous%20Plans%20Reports%20and%20Guidelines/KSEABResponsePlan.pdf">https://www.ksda.gov/includes/document\_center/plant\_protection/Miscellaneous%20Plans%20Reports%20and%20Guidelines/KSEABResponsePlan.pdf</a>

### Check out these websites for more information:

www.emeraldashborer.info www.dontmovefirewood.org www.stopthebeetle.info www.ksda.gov/plant\_protection/ www.kansasforests.org/pubs/community/index.shtml www.kansasarborist.com